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Title: Functional analysis behind a family of multidimensional continued fractions. Part II

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This paper is a direct continuation of "Functional analysis behind a family of multidimensional continued fractions. Part I", in which we started the exploration of the functional analysis behind the transfer operators for triangle partition maps, a family that includes many, if not most, well-known multidimensional continued fraction algorithms. This allows us now to find eigenfunctions of eigenvalue 1 for transfer operators associated with select triangle partition maps on specified Banach spaces. We proceed to prove that the transfer operators, viewed as acting on one-dimensional families of Hilbert spaces, associated with select triangle partition maps are nuclear of trace class zero. We finish by deriving Gauss–Kuzmin distributions associated with select triangle partition maps.

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